SPECIFICATION

To all whom it may concern:

Be it known that we, Dr. John W. Moreland, and Rodney Sego, domiciled in Tennessee State and Utah State, respectively, have invented certain new and useful

METHODS AND APPARATUS TO ENHANCE ELECTRIC CURRENTS

of which the following, together with the accompanying drawings compromise a complete specification.

CROSS REFERENCE TO RELATED APPLICATIONS:

Not Applicable

STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT:

Not Applicable

REFERENCE TO A MICROFISHE APPENDIX:

Not Applicable

BACKGROUND OF THE INVENTION

Field of the Invention

This current enhancer, i.e. amplifier or electric generator incorporating circuitry necessary to practice methods of invention, as it is hereinafter described, relates to the efficient production of large amounts of usable electrical energy directly from spontaneously disintegrating, unstable, radioactive elements, while minimizing losses as heat.

Prior Art

Historically, physicists have struggled first to understand, then to utilize the energies contained in atomic nuclei. Building on published works of Isaac Newton, the physicist, Max Planck, and later Albert Einstein, described atomic particle quantum energies. James Clerk Maxwell described electromagnetic radiation. Some others of the 19^{th} and 20^{th} century scientists who contributed to a general knowledge of atomic physics and published their theories and findings were such researchers as Ernest Rutherford, Gustav LeBon, Marie Curie, Henri Bequerel, Louis de Broglie, Clinton Davisson, Lester Germer, Arthur Compton, Enrico Fermi and Wolfgang Pauli. Added to these are the published writings of more current proponents of string and superstring relativistic quantum mechanics. These and a multitude of others, large and small, have recognized the enormous horsepower energy contained in radium, thorium, uranium, and other radioisotopes.

Many have grappled with the problems of utilizing atomic energy, with limited success, typified by the following developments. State-of-the-art devices which convert alpha and beta particles from spontaneously dissociating atoms directly into electrical energy are nuclear batteries, usually of two types, (1) a high voltage type in which a beta-emitting radioisotope is separated from a collecting electrode by a vacuum or a solid dielectric, providing thousands of volts, but a current measured in only picoamperes; and

(2) a low-voltage type which yields about 1 volt with current measured in microamperes, also very little power. (Radiation Research Corporation reportedly makes a tiny high voltage battery which delivers about 500 V at 160 pA.)

Even though it produces little power, this high voltage type of nuclear battery is considered a constant-current generator. The voltage therein is proportional to the load resistance, but the current is determined by the number of nuclear emissions per second captured by the collector, and does not depend on ambient conditions nor on the load. As the radioisotope ages, the already small current gradually declines.

The low-voltage nuclear battery generally incorporates one of three different concepts: (1) a thermopile or thermocouple, (2) the use of ionized gas between two dissimilar metals, and (3) the two-step conversion of beta energy into light by a phosphor, and the conversion of the light into electric energy by means of a photovoltaic cell.

A more powerful, but still weak atomic battery is a SNAP-generator (Systems For Nuclear Auxiliary Power). One of these utilizing plutonium 238 aboard a 1961 satellite in space produced 3 watts of power for many years. One of several Apollo launches in the 1980s carried a SNAP-generator which produced much more, 50 watts, from 14 kg of Pu-238. A launch in 1997 carried 33 kg of Pu-238. In these, plutonium produced with negligible gamma radiation localized heat from alpha particles, and the localized heat across thermocouple junctions to the cold exterior of the satellite produced power in deep space for sending data back to earth. (Similar, non-nuclear, high-voltage, low-power outputs can be obtained from alternating wafers of silver and zinc, or other combinations of dissimilar metals assembled as dry pile batteries, known for about a hundred and fifty years.)

None of these batteries can deliver sufficient power for general use, but have special applications, such as in clocks, heart pacemakers and in deep space satellite probes.

Starting about during the Dwight D. Eisenhower administration, the U. S. Government undertook to build nuclear powered airplanes having aboard nuclear reactors with fuel rods to heat air to drive turbines. But such power sources were deemed too heavy and impractical for the amount of power they produced.

Large, land-based nuclear power plants create, along with useful electric power, much-disliked fission fragments, radioisotopes, and elemental transmutations, otherwise known as "nuclear waste," more or less composed of plutonium 238 and 239, strontium 90, and barium 140, otherwise unusable, unless they are separated from each other, and re-concentrated through an expensive and hazardous process. For decades, what to do with this "nuclear waste" has been a major subject of national and international debate, because it is viewed as a toxic pollutant which is very expensive to dispose of. In addition, nuclear power plants face significant, superstitious public opposition in many areas of the country and the world.

An example of a powerful but very inefficient release of atomic energy with a limited application is a thermonuclear bomb explosion which converts only about one gram of matter into unrestrained heat energy that destroys square miles (square kilometers) of surface structures and living things, as well as creating a polluting ash cloud containing several highly radioactive isotopes.

It is calculated that one pound (453.6 grams) of uranium contains energy equivalent to three million pounds (1,360,791 kg) of coal. The enormous binding energy contained in unstable atomic nuclei is well-known, but compact and efficient transducers to recover it for practical, everyday use are not known.

SUMMARY OF THE INVENTION

Brief Description of the Invention

The present invention provides methods and apparatus to convert subatomic quantum energies directly into usable electric energy, whereby humans can power their machines, homes, vehicles, aircraft, communications, farms, and businesses, more particularly using a multitude of natural and man-made radioactive or otherwise excited, atomically unstable elements and isotopes applied to transducers structured as electrical circuit components, and stimulated by oscillating voltages to recover useful amounts of electric power.

Object of the Invention

Amplifying electric trigger currents based on these methods and apparatus promotes utilization of plentiful supplies of radioactive elements, including so-called "nuclear waste" as energy sources to satisfy the electrical energy needs of anyone utilizing electrical power, whether for homes, businesses, communication, or for transportation.

Features of the Invention

This amplifier or generator is particularly significant in that it utilizes as little as a few grams of nuclear material, and converts the quantum energies contained in its

spontaneously dissociating, sub-atomic particles into great amounts of usable electric power cleanly and safely, without massive and expensive physical plants. This generator is very unlike weak satellite batteries and other conventional means of nuclear energy transduction. The production of large amounts of electric power from a small, efficient, light-weight, solid-state power supply, without rotating or reciprocating parts, has not been done before. The methods and apparatus explained herein are non-polluting, and leave no objectionable residues behind, but only inert, stable, metallic lead isotopes or similar byproducts.

Portability

This generator is portable, and with certain design refinements can be made mobile;

Disturbing Equilibrium

The generator is comprised of seemingly common electronic parts, or combinations of the same, with substantial alterations. The atoms in the amplifying valves or diodes, conductors, capacitors, inductors, and transformer components tend to be neutral or in a "zero" energy state, that is, each atom has balanced or equal electric charges of positive and negative electricity. Thermal energy and its equivalents, moving electric and magnetic fields, differences in voltage potential, and *radioactive excitations* can free bound electrons in these components, disturb the equilibrium or lower the work function,

and cause electrons to flow and to do work in the electric circuit which is designed to rectify, oscillate, and amplify.

For example, by applying tiny, AM radio frequency microvoltages, or voltages of other frequencies from other sources, to an electric circuit containing electron valves (diodes, transistors and other controllable semi-conductors, as well as vacuum tubes), conductors, capacitors, and transformer cores and windings, which are doped, alloyed, surface coated, influenced, or otherwise transformed with small amounts of radioactive elements (such as UO_2 or a multitude of other radioisotopes), the amplitude of the incoming trigger signal is greatly increased. Large amounts of usable electric power can be derived from radioactively transformed parts, beginning with the initial receiver (connected to the external antenna and ground), and ending at the load end of the circuit.

The words "radioactively transformed" used herein mean brought into contact with, surface coated, doped, alloyed, altered, influenced, changed, or modified in some manner utilizing radioactive or unstable elements, either directly or at a distance.

In other words, from a smaller, high-frequency, or even low-frequency, trigger input signal in the form of a non-periodic, modulated, audio-frequency, radio carrier wave, broadcast by a much higher frequency, periodic wave, acting upon subatomic energy emitters (i.e. alpha and beta particles and the like), a much larger, non-linear amount of output power results. The amplitude modulated radio wave is particularly receptive to pulse noise energy absorption, such as that from atmospheric disturbances, and such as that from *radioactive particle frequencies* and their heterodyne beat frequencies, which is one reason why FM radio became popular as a means to avoid interfering "static."

The same amplification of trigger input power can be obtained from local oscillators which imitate the periodic and non-periodic outputs from radio stations, without the use of large external antennas and grounding components. From small electronic devices producing voice and music by whatever means are available, positive results can be obtained. Further, the trigger inputs can be supplied by laser oscillators and amplifiers, or from other stimulating energy sources utilizing periodic and non-periodic frequencies.

DETAILED DESCRIPTION OF THE METHODS OF THE INVENTION

The Antenna Setup

If an antenna with an Earth ground plane, in conjunction with the current amplifier or generator depicted at 10 in the structured drawings, is used with the herein described methods and apparatus for nuclear energy extraction, some of the energy absorbed by the generator will come from the naturally ionized air around the antenna. The antenna itself, if utilized, may be of almost any configuration. However, the antenna used most successfully to date was a self-resonant double-dipole (called a crossed-dipole by some) or symetrical quadrapole, an upside down L-design with proportional vertical and horizontal polarizing components (about 1 to 2), in conjunction with four, well-grounded counterpoise segments in a guided wave configuration. It was aligned with one of its four 25-foot (7.62 meters) legs pointing to magnetic north, one pointing directly south, one pointing west at right angles to the previous two, and the last pointing east, also at right angles to the north-south pair, all four legs forming a nearly perfect, fifty-foot (15.24 m) cross (1-4 in The Drawings).

The four, horizontal, 25-foot (7.62 m) antenna segments ran parallel to the ground, and were about 12 feet (3.66 m) off the ground. A center wooden pole supported all four

segments at one end, while four other wooden poles supported the other four ends of the segments placed in the directions of the compass. Each overhead segment of the antenna was made up of three pairs (6 wires) of alike-twisted (to minimize capacitance), insulated, stranded about 24-gauge copper wires, each encased strand manufactured with about 22 tiny wires inside its plastic insulation cover, all lending the four overhead, ground-parallel segments a desirable, combined copper mass for gathering AM radio signals.

The four horizontal segments were held up by lengths of insulating nylon cord at either end, threaded through steel eye-bolts anchored in the wooden posts near their tops. Every comparable segment, angle, or part of the four-segment antenna and its counterpoises was, as near as possible, the same length to augment harmonic self-resonance and sympathetic electrical oscillations.

Each horizontal segment had a vertical lead-down wire descending at the center pole, made up of two plastic-insulated, copper wires, also twisted around each other to minimize capacitance between the two strands. The double antenna lead-down wires were attached by careful silver soldering to the center-pointing end of each overhead, ground-parallel antenna segment, and were well-taped over with black electrician's tape. The four lead-down wire pairs, one twisted pair from each of the four segments (eight individual wires total), were bound together lightly with the others at ground level to form a loose cable starting at the base of the center pole, and ran along the surface of the ground for about 65 feet (19.81 m) into the house through the nearest window to where the amplifier or generator was resting on a table. Before the antenna was connected to the amplifier or electric generator in the house, the end of each lead-in wire was bared and all were twisted together to form one large lead.

Back outside where the antenna was located, under each of the four 25-foot (7.62 m) segments of the overhead antenna, running parallel to and about four inches (10.16 cm) off the ground, was a twisted, double-stranded counterpoise wire of a length equal to each antenna segment (5-8 in The Drawings). Each counterpoise segment was attached to the five poles in the same manner as the overhead antenna segments, and their twisted,

twin lead wires also formed a loose surface ground cable which went into the house through the same window, and were connected in the same manner as the antenna wires.

Also, an eight-foot (2.44 m), copper-clad, steel rod was driven into the ground near each counterpoise segment, and one end of a short, insulated copper wire was silver soldered to the steel rod end protruding out of the ground, and the other end of the wire was soldered to the counterpoise next to the steel rod at one-quarter length of the counterpoise segment, measured from the center pole end of the counterpoise.

The antenna and grounded counterpoise setup was erected over a residential septic drain field, so the soil was wet down deep and was very conductive, forming a good electrical ground for the four steel rods driven into the Earth.

While the antenna and grounding components described above were not radioactively influenced, the antenna would have been even more sensitive to input signal voltages had that been the case.

The Special Diodes or Valves

The special, amplifying diodes or valves (18, 19, 26, 27, 38, 39 in The Drawings) were crystalized PbS (galena), good for low frequency radio wave reception because of their relatively high, natural, internal resistance, although other semiconductor materials (even gas and vacuum tubes or their equivalents) and other methods will work, too. After doping or alloying with radioactive materials, the crystalized PbS chunks were probed for polarity, or for n (negative) and p (positive) junctions using a cat-whisker assembly, then medium-sized pieces of the crystal were embedded in "woodsmetal," a very low melting point alloy of tin, bismuth, lead or similar combination of metal conductors.

The galena was first melted in a test tube and doped or alloyed with UO_2, ten to twenty parts galena to one part radioactive material, then the test tube broken to recover the plug after it cooled. The doped PbS had to be crystalized to function as a diode, meaning it could not have so high a content of radioactive material in it that it would not form a PbS crystal when it cooled.

Several different radioactive materials worked in these diodes. Depleted UO_2 worked well. Nuclear elements recovered from raw uranium ore worked well, yielding a

combination of several radioactive isotopes and elements. (Radium would be an ideal dopant, as would "nuclear waste," substantially uranium and plutonium isotopes. Unstable fission progeny will work well, too.) Typically, only a total of about ten grams or less was needed in all of its parts combined together to obtain the high power output, including in the semi-conductor valves, conductors, capacitors, and transformers.

The diodes used herein were positive and negative types. In each stage of the device employing an external antenna with an earth ground plane--in the parts of the circuit where the diodes were used-- one of both types was inserted. (But only one diode was necessary in some configurations.) One diode was polarized to pass one-half the wave, and the second diode passed the other one-half. This prevented flyback, and cancelled inductive reactance.

The diode method of detection used in this rectifying, oscillating, and amplifying generator circuit has the advantage over other methods of demodulating a radio frequency carrier wave in that it produces less distortion, and its dynamic characteristic can be made more linear than that of other detectors, but other methods and means will work, too. Normally, a diode does not amplify the incoming signal, and it tends to draw current from the input circuit to reduce selectivity of the input circuit, but these radioactively transformed diodes added power to the circuit, while still drawing current from the input circuit for a substantial overall power gain.

The Special Staged Transformer Core and Coils

The generator may have as many stages of amplifying transformers (one of several means of amplification) as desired, but the configuration used herein had four stages, three of which, excluding the first detector stage, were mounted on a single, soft steel core about ½-inch (1.27 cm) in diameter and about 18 inches (45.72 cm) long (L2-7 in The Drawings). Each stage added quantum energies to the last. The aforementioned transformer core was a bundle of straight wires, each wire coated with shellac, and all bound together with black, plastic, electrical tape. The transformer core wires needed to be made mildly radioactive, about as much so as low-grade uranium ore, by whatever means available to make them so. (Simply including granulated, radioactive material

among bare wire strands of the core should work.) The transformer core described herein was fabricated out of slightly radioactive, soft steel wire made in (Red) China, and sold in U. S. stores as "picture frame wire." That wire was about 18 gauge, was square-shaped, black, and unplated, but other shapes of the same kind of wire will work as well. It should be noted that radioactive elements, such as samarium and neodymium incorporated into strong permanent magnets lose all radioactivity as their disassociating atomic energies are converted into magnetic flux.

The small, about one-inch-diameter (2.54 cm), pancake-shaped, flat transformer coils were wound one wire thick (with about 22-24 gauge copper transformer wire) per course or layer on a hollow paper tube which fitted over the iron-wire-bundle transformer core. Six pancake coils in all, each wound on a short paper tube section, two coils per stage (a primary and a secondary winding), were slid like donuts over the steel-wire transformer core. As stepup or stepdown ratios in the coils were needed, the number of layers in each individual coil reflected those ratios which were always in multiples of each other to take advantage of harmonic-like phenomena.

The initial stage circuit terminating in what normally would have been the crystal radio headphone load was wound one to two, primary to secondary. The next stage was a stepup ratio of one to ten, primary to secondary, and the following stage was a stepdown ratio of twenty to one, the circuit terminating in a full-wave rectifier and resistance load. The rectifier converted the alternating current to direct current (DC) for purposes of error-free measurement and ease of use, and was not necessary to make the generator work, nor was the large resistor.

Every coil of this transformer series was of the same diameter, only thicker or thinner, having more or fewer courses, depending on turn ratios desired. The ratios or layers of the coils were in multiples of each other, representing harmonic relationships between different lengths of electric wires. Each course or layer of wire in the pancake coils was coated with shellac, after being wound, to make it rigid, and to make the wire adhere to itself without damaging the factory applied transformer wire insulation. As with conventional transformers, paper was also used between layers to provide rigidity and to increase insulation to prevent cross-arcing among layers. These flat coils coupled more

efficiently with each other than usual helix-type inductances, but the latter will also work.

The reason there were stepup and stepdown transformers employed herein (although transformers and other components may suppress harmonics) was to take advantage of varying harmonic-like voltages, currents, and frequency relationships which yielded more power than otherwise obtainable from a steady, fundamental voltage and frequency. For instance, radio engineers working with vacuum tubes know to compensate for a frequency double the incoming line frequency, because it can draw heat out of vacuum tube cathodes, as does half the base frequency. This well-known phenomenon is related to the number of nodes produced in alternating currents. In other words, the harmonics exploited in the generator described herein, which is itself a large transducer made up of smaller transducers, can absorb heat and quantum energies, and deliver them in usable amounts elsewhere in a circuit, such as to the load.

Amplifying transformer inductances situated on the common, open iron core developed much, if not most, of their power using the demodulated, non-periodic, audio-frequency range part of the radio signal, although other frequency ranges also work. The open core configuration was selected, in this specific application, to reduce heat generation and electric arcing at the high frequencies utilized, but other core configurations will work, too.

The first transformer stage (L1 in The Drawings) was the low bypass filter contained in the much-altered crystal radio. In its unaltered form, it was obtainable at a hobby store, or built from magazine or book schematics, a device popular in the early 1900s, and viewed more as a scientific curiosity today. The one used herein had a sintered-ferrous or an air-core low bypass filter. This greatly-modified radio received the trigger input signal in one embodiment of this amplifier or generator.

Off-the-shelf crystal radios typically utilize a standard, one-diode detector or "valve" to demodulate only one-half the incoming wave; however, the one used in the generator described herein was significantly altered with the insertion of two galena (PbS) diodes doped with radioactive elements, one a positive diode and the other a negative diode, or diodes which each allowed one-half the incoming, modulated AM radio wave to pass,

amplifying it in the process. Also, an air capacitor, similar to that described as follows, was inserted in the crystal radio stage in series with a special, radioactively-transformed, fixed capacitor, also described hereafter.

The Standard, as well as Special Capacitors

There were two types of capacitors employed in each stage of the device utilizing the external antenna and Earth ground plane. The first type was a standard, adjustable, four-gang air capacitor. It had two 560 mfd gangs, one 300 mfd, and one 150 mfd gang on a single shaft, plus a couple of attached, independent, adjustable mica trimmer capacitors. Not all these adjustable capacitors were needed for tuning, and just about any variety of air-core or adjustable capacitor will work in the circuit, provided it gives adequate capacitance. The first, the crystal radio detector circuit, was further altered when it was fitted with one of these adjustable, four-gang capacitors (C1 in The Drawings). Subsequent stages used one of these or one or more separate, adjustable mica trimmer capacitors (C2-6 in The Drawings) to tune each coil, always in series with a fixed, radioactively transformed capacitor explained as follows.

The second type was a specially-fabricated, fixed capacitor, about 3 inches (7.62 cm) in diameter (C7-12 in The Drawings). Each of these capacitors was a pair of discs of conducting metal—such as brass or copper—with a copper lead wire soldered to each disc. Any of several, electrically-conducting materials and shapes may be used for the capacitor plates--nickel, platinum, carbon, copper, bismuth, silver, gold, zinc, thorium, etc., or any combination of these conductors. Between each pair of discs of these fixed capacitors was inserted a slightly larger disc of coffee filter paper, each side of which was lightly dusted with finely powdered UO_2 or some other radioactive element or combination of elements to produce a thin film. The in-turned disc surfaces were first scratched with fine sandpaper or steel wool, and washed with alcohol. (To do away with the thin film of powdered UO_2, an acid solution containing the same element or combination of radioisotopes may be used to etch the in-turned surfaces, or the discs may be actually alloyed with, composed of, or otherwise brought into contact with radioactive elements by whatever means available to do it. A multitude of radioactive substances will

work herein, the same kinds mentioned in conjunction with the special diodes and special transformers, such as "nuclear waste," fission progeny, radium, tritium, and so on.) After the capacitor plates were assembled congruently face to face, they were squeezed together in a vise to limit the presence of air, while hot plastic glue or wax was applied around the circumference to hold the pieces together as one unit.

These disc capacitors amplified electric power in the circuit in which they were placed when the many, "random," disassociating nuclear particles struck the plate faces to produce ions and free electrons, or when the atomic particles and rays imparted their kinetic energies to periodic and non-periodic, in-phase electric and magnetic fields, sometimes called Maxwellian "displacement currents" which were induced in and around the capacitor plates.

Pre-tuning and Connecting the Generator to the Antenna and Ground Wires

Before connecting the much-altered radio first stage with its subsequent amplifying stages to the antenna and ground wires, the completely assembled generator was subjected to pre-tuning to a selected radio frequency, utilizing a signal generator in conjunction with an oscilloscope. Each stage was tuned for maximum power output, observing the null points appearing on the oscilloscope, meaning both the primary winding and secondary winding of each tight coupled stage were brought into resonance or into exact phase with the other stages to produce a coherent wave overall. (Lasers may be substituted in similar applications.) Coupling was further assured by the common flux lines present in the iron core-wires of the transformer. As each additional stage was added, the preceding windings were re-tuned, along with the new one, until every coil of every stage was tuned exactly, or brought into exact resonance with the incoming signal.

The antenna and ground wires of the generator formed part of the secondary inductance of a tank circuit, the antenna and Earth's ground plane substituting as the two capacitor plates, with the air between being the dielectric.

You will see that it takes that fancy Litz wire to make coils much higher than 500 Ω.

Absorption of Nuclear Energy by Other Amplifying Valves

Another example of a crystaline semi-conductor absorbing energy from radioactive elements, and re-emitting that absorbed energy as additional electric power was discovered by experimentation relative to the amplifier or generator described herein (Fig. 2 in The Drawings). Paint from the power transistor of a conventional hi-fi speaker amplifier was scraped off to reveal the bare silicon crystal material underneath. Placed upon the bare silicon was granulated UO_2. The increased power drawn into the transistor from the nuclear material melted the windings in the down-circuit speaker, destroying it completely. This demonstrated how a non-periodic, audio-frequency wave (or a similar wave associated with other frequency ranges and bandwidths) activates and absorbs the quantum energies emitted by radioactive elements in conjunction with crystaline semi-conductors and metal conductors. This experiment revealed the key to making this generator mobile for propelling land vehicles, ships, and aircraft without the use of an external antenna and Earth ground plane. Designing suitable oscillatory circuits is all that is necessary, utilizing simple electronic devices to provide trigger signals.

Conclusion, Ramifications, and Scope of the Invention

Thus, the reader will see this solid-state or near solid-state amplifier or generator can be utilized by anyone anywhere who normally uses electric power. The generator frees the user from being connected to and from being reliant on public utility power grids, and from being reliant on fossil and other chemical fuel sources. The fuel it utilizes is inexpensive, lasts months to years, and very little fuel is needed in comparison with fossil fuels which are the most common energy source at this time. The generator is compact for the amount of electric energy it produces, weighing but a few pounds, unlike other bulky methods, such as Sun, wind, hydroelectric, geothermal, chemical and nuclear batteries, fossil fuel transducers, and conventional nuclear power plants.

While the above description contains many specifications, these should not be construed as limitations on the scope of the invention, but rather as an exemplification of a preferred embodiment thereof. Many other variations are possible. For example, this current enhancer, amplifier, transducer, or electric generator can be built small enough to power a watch, or large enough to power ships at sea, cities on land, or settlements in space. It can power land vehicles, aircraft, watercraft, homes, businesses, and farms.

The generator may be constructed in many sizes, colors, or shapes. The parts in other configurations and refinements may be multiplied to derive more power, or minimized to derive less power. Parts, such as the antenna, grounding parts, cat whisker diodes, capacitors, and transformers can be eliminated, combined with other components, or altered in several ways. The tuning parts may be eliminated or substituted for vacators, frequency synthesizers, or similar components. The tuning procedure itself may be completely eliminated, changed, or automated. The circuit and circuit components may be altered, changed in shape, function, and size, substituted for others, made less complicated, and accompanied by local control, timing, noise-suppressing, signal, and switching circuits. It may have light or heavy shielding. The parts may be made as plug-in modules and printed circuits; and made in conjunction with lasers, gas plasmas, magnets, crystals, a variety of semi-conductors and other amplifying valves, whether solid-state components or vacuum and gas-filled tubes or their equivalents; made with combinations of conductor metals, a variety of natural and manmade fuel isotopes and sources, not excluding tritium, deuterium, and protium; made with focusing apparatuses; and made in a multitude of other ways which apply the methods and apparatus described herein.

Small iron or nickel-platinum tubes filled with deuterium, deuterium oxide, and tritium, especially in conjunction with other solid radioisotopes may be substituted in oscillatory circuit components, such as in the capacitors and transformers. The whole amplifier or parts of it may be immersed in hydrogen isotopes.

Accordingly, the scope of the invention should be determined not by the embodiments illustrated, but by the appended Claims and their legal equivalents.

Any improvements to the generator, its control, and its applications are obvious to electronic engineers and physicists, once they are shown the principles of the generator's operation.

Additional objects and features of the invention will become apparent from the following detailed description and drawings.

THE DRAWINGS

In the drawings:

FIG. 1 is an electric circuit schematic of an electric current enhancer, amplifier, or generator utilizing an antenna and Earth ground plane;

FIG. 2 is an electric circuit schematic of a radioactively transformed power transistor without an antenna and Earth ground plane.

DETAILED DESCRIPTION OF APPARATUS OF THE INVENTION

Referring now to the drawings:

An illustrated preferred embodiment of a device utilizing an antenna with an Earth ground plane in Figure 1 is shown generally at 10. The overhead antenna segments 1, 2, 3, 4 are matched by counterpoise segments and grounding rods 5, 6, 7, 8. The antenna and Earth ground plane first stage 12 is a greatly altered AM radio receiver having an air-core or sintered, ferromagnetic primary and secondary (also called a low bypass filter) 14. Filter 14 connects in parallel to an adjustable ganged air capacitor 13 and a fixed or set, radioactively-transformed capacitor series 16 which is further connected, i.e. through two radioactively doped cat whisker diodes 18 and 19 to the primary 20 of a stage two, the earphone or load of the radio circuit.

The primary 20 of stage two steps up the voltage one to two in the secondary winding 22 of stage two. Again, 22 connects in parallel-series to an adjustable air-capacitor or mica trimmer capacitor 23 and a fixed, radioactively-influenced capacitor 24 which connect in parallel optionally through two more doped cat whisker diodes 26 and 27 to the primary 28 of stage three, passing in parallel through another series of an adjustable air-capacitor or an adjustable mica trimmer 29 and a fixed, radioactively-transformed

capacitor 30. The reason every coil in each stage is tuned separately is because as a signal passes through a transformer, it exits slightly de-tuned from the secondary winding.

The stepup ratio of the primary 28 to the secondary 32 transformer winding of stage three is one to ten, and has exactly the same components as the previous stage two. The adjustable series-parallel trimmer or air-capacitors 33 and 35 and fixed radioactively-influenced capacitor series 34 and 36, may go through optional diodes 38 and 39, and terminate in transformer winding 40. All transformer windings except 14 tight-couple together through transformer iron core 42.

Primary transformer winding 40 steps down the voltage twenty to one to secondary winding 44, again connected to a parallel-series capacitor array 46, a fixed one, and an adjustable one 47, exactly like foregoing stages. Capacitor 48 is a standard, alternating current capacitor of about one thousand microfarads to smooth out ripples in the current, and is connected as shown to a standard, full-wave rectifier 50, which is connected directly to the two leads of the load 52, in this case shown as a one hundred megaohm resistor which may be switched in and out of the circuit to accommodate other loads or purposes for which the circuit may be used.

Figure 2 shows an incoming trigger signal from a source 60 other than an AM radio station, leading to a radioactively-influenced transistor 62, which connects to a conventional battery power source 64 and useful load 66 such as a light bulb resistance.

Although preferred embodiments of the invention have been described herein it is to be clearly understood that the present disclosure is by way of example only and that variations are entirely possible without departing from the subject matter coming within the scope of the following claims, which subject matter is regarded as the invention.